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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Noemie Lesartre

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EXAMINER

BODAWALA, DIMPLE N

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

08/20/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/598,357	Applicant(s) LESARTRE ET AL.	
	Examiner DIMPLE N. BODAWALA	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

New Ground of rejection

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. **Claims 32-34, 36-38 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al. (WO 03/084728 having translation similar to US 2005/0200033) in view of Kudert et al. (US 5,523,045) or Osawa et al. (US 2003/0122281).**
3. As to claims 32 and 40-42, Kadota et al. discloses an invention related to produce optical member such as plastic lens, wherein invention is capable to use **RIM machine** for mixing component A and component B, immediately after mixing the mixture is cast into a casting mold (See abstract; Paragraph # 111, 143, 149), thus, invention is capable to have **mixing chamber** to prepare mixture to be molded. It further discloses mold body having upper mold and lower mold halves (2A,2B) and mold cavity (4) defined therebetween, wherein mold cavity is sealed by gasket (5) in order to define **sealed cavity** with a substantially circular shape comprising a center and a transversal thickness corresponding to that of the lens to be manufacture, wherein the cavity being limited by two plates (2a,2b) between which is inserted an elongated seal (5) (See figure 3; paragraph #145) and comprising **an entry side (7)** provided with a cast opening (71,73) and **an evacuation side (92)** opposite to the entry side (See figure 13). It further teaches that the invention comprises **an injection duct (100)** connecting the mixing chamber (not shown but discussed in the disclosure) to the mold cavity (See figure 9a), wherein the injection duct having an outlet opening (101) (See figs.9a-9b); and flat space (72) connecting the outlet opening of the injection duct (100) to the cast opening of the mold cavity (See figures 1, 4, 13 and 16); and nozzle member (101) is aligned with the flat portion of flat space (See paragraph #211), and, thus, such configuration enable to define **spout**. It further teaches that the casting jig further comprises a discharge groove (81)

which could be use as **vent (81)** on the evacuation side (92) of the mold (See figure 13). It further teaches that the invention comprises casting jig as **filling means** is aligned with casting inlet and capable to push the mixture from the discharge point (16) of the mixing chamber to the mold cavity via injection duct opening and spout for filling the mold cavity under pressure during use (See paragraph # 223-228). Figure 9 of Kadota further teaches that the mold cavity extends along a titled median plane making an angle different from zero with a horizontal plane and comprises a low entry side (73) and a high evacuation side (92).

4. Kadota et al. teaches that the flat space (72) connecting the outlet opening of the injection duct (100) to the cast opening of the mold cavity (See figures 1, 4, 13 and 16); and nozzle member (101) is aligned with the flat portion of flat space (See paragraph #211), and, thus, such configuration enable to define spout, but fails to teach or suggest configuration of spout as claimed.

5. Kudert et al. ('045) teaches that the invention comprises runner means which includes a polymer flow stream redirecting and feeding device associated with each co-injection nozzle for redirecting the path of each branched flow stream for forming a layer of the item to be injected and feeding them to each nozzle (See col.7 lines 29-36), wherein configuration of the **nozzle member may be considered as spout** as claimed, thus, a spout is capable to connect the outlet opening of the injection duct or runner means to the casting opening of the mold cavity. Furthermore, figures 130-137 of Kudert et al. clearly shows that the **spout** (or nozzle member) defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity. Kudert et al. ('045) discloses an injection molding for manufacturing a plastic article which comprises a feed connection (1101) comprises a central feed channel (546) having a fan shaped gate as a spout having **delta-shaped is counted as flat trapezoidal faces of the spout**, wherein the central feed

Art Unit: 1791

channel is expanding in the mold cavity main plane toward the mold cavity (see figure 133); and further comprises two side feed channels arranged symmetrically to the mold symmetry plane on either side of the central channel (See figure 133), wherein each side feed channel having a curved portion extend along the feed sill of the mold cavity (See figs 131-137; col.2 lines 60-67).

6. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the configuration of nozzle member or spout of **Kadota et al. ('058)** by providing flat space of spout (or nozzle member) being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the opening of the mold cavity (See figures 130-137) as taught by **Kudert et al.**, wherein such configuration of the spout enable to expand the polymer composition very quickly along the periphery of the mold cavity within the main plain, in order to cast the product with excellent quality and features.

7. Osawa et al. discloses an injection molding apparatus comprises mold body (1) defining mold cavity (2), spout (3) and an injection duct opening (not labeled but shown in figure 5), wherein the spout (3) is located between opening of the mold cavity and the outlet of injection duct (See figure 5), wherein the spout (3) defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity (See figures 5-12). It further teaches that the spout having a flat **trapezoidal face** (See figures 5-12), wherein such configuration of spout enable to direct the flow of the material in at least two streams that flow through the cavity and then meet at a confluent point so that the molding material portions are joined together along a joint plane, wherein such configuration of the molded article exhibited with stabilized strength and outer appearance (See paragraph # 14-16).

8. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the configuration of spout of **Kadota et al. ('058)** by providing flat space of spout being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the opening of the mold cavity (See figures 5-12), wherein such configuration of spout enable to direct the flow of the material in at least two streams that flow through the cavity and then meet at a confluent point so that the molding material portions are joined together along a joint plane, and thus able to exhibit the molded article with improved strength and outer appearance (See paragraph # 14-16) as taught by **Osawa et al. ('281)**.
9. As to claim 33, Figure 9 of Kadota shows that the injection duct is prolonged by a portion extending in the flow direction from the outlet opening up to a closed end, the portion forming a reserve for trapping a first part of the mixture flowing in the injection duct (See figures 1-8 and 10-17 also with the space near casting opening).
10. As to claim 34, Kadota further teaches that the vent (81) provided on the evacuation side of the mold cavity comprises an aperture which is small enough to avoid reactants contained in the mixture to flow outside (See figure 13).
11. As to claim 36, Kadota further teaches that the invention comprises a space opening (83) on the evacuation side of the mold cavity and adapted to trap air contained in the mixture, wherein the mold cavity and the space being surrounded by a common continuous seal (5) (See figure 13).
12. As to claim 37, Kadota further teaches that the vent comprises an aperture (81) provided in the seal (5) on the evacuation side (92) of the mold cavity (See figure 13).
13. However, claims **32-34, 37-38** of the instant application cite structural limitations with the intended uses as further limitations of the subject matter, such as **mixing chamber** for preparing mixture; **filler** to force the flow of the mixture from the chamber to the cavity; **portion of the injection duct** for forming a reserve for trapping a first part of the mixture flowing in the duct; **aperture** involved to avoid reactant contained in the

mixture to flow outside; **venting aperture** for the application of a post injection pressure in the mold cavity after filling and air evacuation. As we know that if prior arts disclose all claimed structural limitations as discussed above, so the structural limitations of the arts are capable to operate in desired functions as required. Intended use has been continuously held not to be germane to determining the patentability of the apparatus, *In re Finsterwalder*, 168 USPQ 530. The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235, 238. Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during the intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647.

14. **Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al. (WO 03/084728 having translation similar to US 2005/0200033) in view of Kudert et al. (US 5,523,045) or Osawa et al. (US 2003/0122281) and further in view of Andino et al. (US 2002/0163095).**

15. Kadota et al. teaches that the evacuation side of the mold cavity comprises vent aperture, but does not cite that the aperture comprises a removable valve as cited in claim.

16. Andino et al. discloses a mold for casting ophthalmic lenses, wherein mold comprises mold halves (112,114) and a mold cavity (115) filled through the bottom opening (111) and is vented from the top opening (113) (See figures 6A-6B). It further teaches that the venting takes place through the pressure relief valve (118) in communication with the top opening of the cavity (See paragraph # 71).

17. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of **Kadota et al.** by placing valve into the

vent aperture as taught by **Andino et al.**, wherein such configuration enable to vent through the opening under the application of sufficient pressure, which would be useful to remove flash from the finished lens (See paragraph # 71), in order to manufacture lens with excellent appearance and quality.

18. **Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al. (WO 03/084728 having translation similar to US 2005/0200033) in view of Kudert et al. (US 5,523,045) or Osawa et al. (US 2003/0122281) and further in view of Su et al. (US 2003/0173692).**

19. Kadota et al. teaches that the evacuation side of the mold cavity comprises vent aperture, but does not cite that the aperture comprises a plug as cited in claim.

20. Su et al. discloses a mold assembly for making an optical lens, wherein assembly is capable to use a plug (44) for filling any unfilled spaces created between the interior surfaces of the mold (See paragraphs 47-48), thus, plug of Su et al. enable to use for blocking vent aperture. It further teaches that the plug can be made from non-adhesive thermo plastic material such as an elastomeric material, thermoplastic rubber, etc., or metal, alloy, ceramic material, plastic material, glass or the like (See paragraph # 47), wherein use of elastomeric material for plug indicates that the plug is adapted to expand and the close the aperture due to an increase of the temperature when the cavity is filled. It further teaches that the plug can take various geometric shapes such as round, oval, triangular, rectangular, square, etc. (See paragraph # 47).

21. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of **Kadota et al.** by placing plug of **Su et al.** within the vent aperture of the primary art, because such plug is capable to make from elastomeric material, which having property of expanding during the application of temperature, in order to seal the vent aperture, and maintain temperature within the cavity during the casting operation, in order to mold the lens with excellent appearance and quality.

Response to Arguments

22. Applicant's arguments, see Remarks, filed on 5/3/2010, with respect to rejection of claims under 35 USC 112, second paragraph have been fully considered and are persuasive, therefore, the rejection of claims under 35 USC 112, second paragraph has been withdrawn in view of amendment to the claims.

23. Applicant's arguments, see Remarks, filed on 5/3/2010, with respect to the rejection(s) of claim(s) under 102 and/or 103, wherein Applicant argues that **Kadota et al. (WO 03/084728); or Kadota et al. (US 2005/0200033)** discloses casting groove both-side member (72) is not tangentially connected to the circumference of the cylindrical member, thus, Kadota et al. does not disclose ***a spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity***. Applicant further argues that **Hill et al. (US 5,656,210)** does not disclose a spout connecting the outlet opening of the injection duct to the casting opening of the mold cavity, but instead, Hill et al. discloses the reactive material passes directly from the mixhead (7) to the gate (13), wherein Gate (13) is not spout, and gate is not limited by two diverging sides inclined on either side of that axis, and does not connect to any circular shape, thus, Hill et al. does not disclose ***a spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity***. Applicant further argues that Hill et al. does not disclose ***a mold cavity being limited by two plates between which is inserted an elongated seal***. Applicant further argues that **Andino et al. (US 2002/0163095)** does not disclose or suggest each claim limitation missing from Hill et al. and/or Kadota et al. as discussed above. Applicant further argues that Andino et al. does not disclose a spout connecting the outlet opening of the injection duct to the casting opening of the molding

cavity; and further does not disclose a mold cavity being limited by two plates which is inserted an elongated seal, but rather, Andino et al. teaches a mold cavity that is formed by two mold halves only. Applicant further argues that neither **Kudert et al. (US 5,523,045)** or **Osawa et al. (US 2003/0122281)** disclose or suggest *a spout connecting the outlet opening of the injection duct to the casting opening of the mold cavity; a spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity; and a mold cavity being limited by two plates between which is inserted an elongated seal.*

24. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this situation, **Kudert et al. ('045)** teaches that the invention comprises runner means which includes a polymer flow stream redirecting and feeding device associated with each co-injection nozzle for redirecting the path of each branched flow stream for forming a layer of the item to be injected and feeding them to each nozzle (See col.7 lines 29-36), wherein nozzle configuration could be considered as spout as claimed, thus, a spout is capable to connect the outlet opening of the injection duct or runner means to the casting opening of the mold cavity. Furthermore, figures 130-137 of **Kudert et al.** clearly shows that the spout defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity. Furthermore, **Osawa et al.** discloses an injection molding apparatus comprises mold body (1) defining mold cavity (2), spout (3) and an injection duct opening (not labeled but shown in figure 5), wherein the spout (3) is

located between opening of the mold cavity and the outlet of injection duct (See figure 5), wherein the spout (3) defining a substantially flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the mold cavity (See figures 5-12). Thus, such configuration of spout of secondary arts would be useful to modify the configuration of the spout of the primary art, in order to flow material quickly within the molding cavity. Furthermore, Andino et al. and Su et al. used for modify the configuration of vent hole of primary art by providing either valve or plug as discussed above, thus, Applicant's arguments with respect to the configuration of spout for Andino et al. and Su et al. have been fully considered but they are moot, as the secondary arts did not introduce for the configuration of the spout. Therefore, Applicant's arguments have been fully considered but they are moot in view of a new ground(s) of rejection as discussed above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIMPLE N. BODAWALA whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

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/D. N. B./

Examiner, Art Unit 1791

/Philip C Tucker/

Supervisory Patent Examiner, Art Unit 1791